Abstract

Multiband Radio System and Method for Operating a Multiband Radio System

The invention is related to an arrangement for isolation of signals between a receiving branch (RX) and a transmitting branch (TX) of a multiband radio system. Each of said branches (RX, TX) comprises at least two radio frequency filters (RF1, RF2; TF1, TF2) with a stop band function. Within each of said branches (RX, TX) each of said radio frequency filters (RF1, RF2; TF1, TF2) is adapted to a given frequency band, whereby said frequency bands are different from each other. Furtheron there are provided a receive/transmit switch (RTSW) and a receiving/transmitting filter selector (RTFS). In the receiving mode multiplexer switches (RSW1, RSW2) in said receiving branch (RX) are switched to a first one (RF1) of said radio frequency filters (RF1, RF2) being adapted for passing through signals of a first one of said frequency bands, whereas in said transmitting branch (TX) multiplexer switches (TSW1, TSW2) are switched to a radio frequency filter (TF2) being adapted for passing through signals of a second one of said frequency bands, so that, if a signal to be received by said receiving branch (RX) is also received by said transmitting branch (TX), said signal is blocked within said transmitting branch (TX) by the selected radio frequency filter (TF2).

(Fig. 1)